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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/665,105	09/20/2000	Yoshio Tozawa	32405W053	8691

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EXAMINER

BLACKMAN, ROCHELLE ANN J

ART UNIT PAPER NUMBER

2851

DATE MAILED: 03/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/665,105

Applicant(s)

TOZAWA, YOSHIO

Examiner

Rochelle Blackman

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 10-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-4 and 17-22 is/are allowed.
- 6) ☒ Claim(s) 1 and 11-15 is/are rejected.
- 7) ☒ Claim(s) 10 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-4 and 10-22 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

1. Claim 15 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

The claim recites "portions of said chassis other than said mounting seat member are disposed apart from said vehicle body..." which is the same limitation, with the exception of the word "member", recited in claim 1, its parent claim.

2. Claim 15 is also objected to because of the following informalities: It recites the limitation "said mounting seat member" in the second line of the claim. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander, Jr., U.S. Patent No. 6,083,353 in view of Tsuchiya et al., U.S. Patent No. 5,530,420.

Alexander, Jr. discloses "a structure for mounting cameras on a vehicle"(see FIG. 16); "a pair of stereo cameras..."(see 10 and 12 – does not appear in FIG. 16, but appears in the disclosure for FIG. 16) of FIG. 16); "a chassis..."(see 42 of FIG. 16) "mounted on a vehicle" (see col. 10, lines 44-49); and "a mounting seat surface...fixed onto a front rail..." that "supports all weight of said chassis..."(see 44 of FIG. 16); and "portion of said chassis other than said mounting seat member(surface) are disposed apart from said vehicle body when said chassis is mounted on said vehicle"(see "chassis" 42 in relation to "mounting seat surface/member" 44 in FIG. 16).

Alexander does not appear to disclose a chassis "mounted in" a vehicle.

Tsuchiya teaches that it is known to mount "a pair of CCD cameras"(see 11a, 11b, 12a, and 12b of FIG. 4) of a "stereoscopic optical system"(see 10 of FIG. 4) inside, "at a front portion on the ceiling...", of a car (see col. 6, lines 25-27). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to flip or rotate the entire apparatus (the "stereo cameras" 10 and 12, "chassis" 42, and "mounting seat surface" 44) of the Alexander, Jr. reference so that the "mounting seat surface" is above the "chassis" 42 and mount the "mounting seat surface" inside, at a

front portion of the ceiling or roof of a car in order to improve aerodynamics and to keep the lens of the stereo cameras clean and also for aesthetic purposes.

2. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander, Jr., U.S. Patent No. 6,083,353 in view of Tsuchiya et al., U.S. Patent No. 5,530,420 as applied to claim 1 above, and further in view of Kautz, U.S. Patent No. 5,835,806.

Alexander, Jr. disclosed the claimed invention except for a chassis "formed by one material having a high-coefficient of thermal conductivity" and/or formed from "an aluminum alloy".

Kautz teaches that it is known to provide a mount 44 for camera 14, fabricated from a sheet of aluminum alloy, which has a high thermal conductivity in Fig. 3.

It would have been obvious to one ordinary skill in the art at the time the invention was made to fabricate the "chassis" 44 of the Alexander, Jr. reference of aluminum alloy, which has a high thermal conductivity, as taught by Kautz in order to conduct the heat generated by the cameras away from the cameras.

Allowable Subject Matter

1. Claim 10 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

2. Claims 2-4 and 17-22 allowed.

3. The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach or suggest the limitation of claim 16, "said mounting seat is about 50 mm in lateral direction", in combination with the limitations of claim 1.

The prior art does not teach or suggest the limitation of claim 10, "said chassis has a cross section consisting of...a hook-like curved portion integrally formed along a front edge of said main body" in combination with the limitations of claim 1.

The prior art does not teach or suggest the limitation, a "taper plate being formed of a wedge-like plate and sandwiched by said mounting seat surface of said chassis and said mounting position of said vehicle body when said chassis is mounted onto said vehicle body" in combination with the other limitations of claim 2.

The prior art does not teach or suggest the limitation, "falling preventing members for engaging the both ends of said chassis with the vehicle body" in combination with the other limitations of claim 4.

The prior art does not teach or suggest the limitation, "falling prevention means for preventing said chassis from falling before said chassis is mounted onto said vehicle body" in combination with the other limitations of claim 17.

The prior art does not teach or suggest the limitation, "said chassis having a cross section consisting of...a hook-like curved portion integrally formed along a front edge of said main body" in combination with the other limitations of claim 20.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rochelle Blackman whose telephone number is (703) 308-2879. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russell Adams can be reached on (703) 308-2847. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

RB
March 21, 2003


RUSSELL ADAMS
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